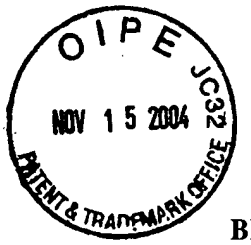

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of

Juergen SIENEL, et al.

Appln. No.: 10/069,612

Confirmation No.: 3431

Filed: February 27, 2002

Docket No: Q68455

Group Art Unit: 2654

Examiner: Qi HAN

For: TELECOMMUNICATION SYSTEM, SPEECH RECOGNIZER, AND TERMINAL, AND METHOD FOR ADJUSTING CAPACITY FOR VOCAL COMMANDING (As Amended)

SUBMISSION OF APPEAL BRIEF

MAIL STOP APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Submitted herewith please find an Appeal Brief. The Appeal Brief fee of $330.00 paid on October 20, 2003 is to be applied to the current statutory fee of $340.00 for this Appeal Brief since the Examiner reopened prosecution (see MPEP 1208.02). A check for $10.00, the difference between the fee paid on October 20, 2003 and the current fee of $340.00, is attached. The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account. A duplicate copy of this paper is attached.

Respectfully submitted,

Christopher R. Lipp
Registration No. 41,157

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: November 15, 2004

Attorney Docket No.: Q68455

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of

Juergen SIENEL, et al.

Appln. No.: 10/069,612

Confirmation No.: 3431

Filed: February 27, 2002

Docket No: Q68455

Group Art Unit: 2654

Examiner: Qi HAN

For: TELECOMMUNICATION SYSTEM, SPEECH RECOGNIZER, AND TERMINAL, AND METHOD FOR ADJUSTING CAPACITY FOR VOCAL COMMANDING (As Amended)

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

MAIL STOP APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is an Appeal from the final rejection of June 14, 2004 (Paper No. 18) of claims 1-14 in Application No. 10/069,612. In accordance with the provisions of 37 C.F.R. § 1.192, Appellant submits the following:

I. REAL PARTY IN INTEREST

The real party in interest in this appeal is Alcatel. Assignment of the application was submitted to the U.S. Patent and Trademark Office on February 27, 2002, and recorded on the same date at Reel 012764, Frame 0813.

II. RELATED APPEALS AND INTERFERENCES

There are no other prior or pending appeals, interferences or judicial proceedings known to Appellant, the Appellant's legal representative, or Assignee which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1-14 are pending, are rejected, and are the subject of this appeal. All of the claims are set forth in the attached Appendix.

IV. STATUS OF AMENDMENTS

No claim amendments were requested subsequent to the Final Office Action of June 14, 2004.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The present invention is directed to a telecommunication system comprising a terminal coupled to a network comprising a speech recognizer for vocal commanding.[1]

As shown in Figure 1, a terminal 1 comprises a processor 10 (comprising a memory not shown), a man-machine-interface (mmi) 11 such as a display, keyboard, microphone or loudspeaker, a first unit 12, a second unit 13 and a transceiver 14. The terminal 1 is communicably linked via base stations 4 and 5 to a switch 3 which comprises a coupler 33, a processor 30, a third (detector) unit 31, and a fourth unit 32. The coupler 33 is communicably linked to speech recognizer 2 which comprises a processor 20, a memory 21, an eighth (detector) unit 22, a ninth (adjustor) unit 23, a tenth unit 24 and an eleventh unit 25.[2]

According to a first embodiment of the present invention, when a user of terminal 1 wants to perform vocal commanding, such as name dialing, the user dials a first telephone number, for example by pressing keys of the keyboard of mmi 11. In response to the dialed first telephone number, the processor 10 causes the transceiver 14 to send a first signaling signal to the base station 4 and the switch 3. Under control of the processor 30 of the switch 3, the first signaling signal is supplied the third (detector) unit 31 which detects the first signaling signal and informs the processor 30 that the user wants to perform name dialing via the terminal 1. In response, the processor 30 sends a first information signal to the speech recognizer 2 for

[1] Application at page 1, lines 1 and 2.

[2] Application at page 4, line 20 - page 5, line 12.

informing the speech recognizer 2 that the user wants to perform name dialing via terminal 1. This first information signal either comprises for example a user identification and/or a terminal identification (direct addressing), or an address code which in the switch 3 is related to the user identification and/or terminal identification (indirect addressing).[3]

In the speech recognizer 2, the eighth (detector) unit 22 detects the first information signal under control of the processor 20 and informs the processor 20 of the detection. In response, the processor 20 controls the ninth (adjustor) unit 23 to send a first capacity parameter having a first value (for example, sampling rate 8000, bandwidth 4.8 kbps, noise reduction: no, complexity 5 wMops, purpose: name dialing) to the switch 3 and/or terminal 1.[4]

In response to the first capacity parameter (at the hand of said user identification and/or terminal identification and/or address code), the processor 30 in switch 3 makes available a predefined bandwidth between the terminal 1 and the switch 3, adjusts a predefined sampling rate, reserves a predefined amount of time, and/or deactivates noise reduction. As a result, the user can now perform name dialing, by entering speech via a microphone of the mmi 11, which is supplied to the speech recognizer 2 via the switch 3 for recognizing the speech. In response, the speech recognizer 2 recognizes a name and a corresponding destination number stored in

[3] Application at page 5, line 15 - 30.

[4] Application at page 5, line 30 - page 6, line 6.

memory 21 is sent to switch 3. As a result, a speech connection is created from the terminal 1 via the switch 3 to a destination defined by the destination number.[5]

Then, if the user of terminal 1 wants to perform vocal commanding for controlling and/or commanding, for example, certain services available in the network, the user dials a second telephone number (different from said first telephone number). In response to the dialed second telephone number, transceiver 14 sends a second signaling signal (different from said first signaling signal) to the base station 4 and the switch 3. Under control of the processor 30 of the switch 30, the second signaling signal is supplied to the third (detector) unit 31 which detects the second signaling signal and informs the processor 30 that the user wants to perform command and control via the terminal 1. In response, the processor 30 sends a second information signal to the speech recognizer 2 informing the speech recognizer 2 that the user wants to perform command and control via the terminal 1. The second information signal either comprises a user identification and/or a terminal identification (direct addressing), or an address code which in the switch 3 is related to the user identification and/or terminal identification (indirect addressing).[6]

In the speech recognizer 2, the eighth (detector) unit 22 detects the second information signal and informs the processor 20 of the detection. In response, the processor 20 controls the ninth (adjustor) unit 23 in such a way that a second capacity parameter having a second value

[5] Application at page 6, lines 6-17.

[6] Application at page 6, line 18 - page 7, line 5.

(for example sampling rate 11000, bandwidth 5.0 kbps, noise reduction: no, complexity 10 wMops, purpose: command & control) is sent back to the switch 3 and/or the terminal 1. In response to this second capacity parameter, the processor 30 of the switch 3 makes available a predefined bandwidth between the terminal 1 and the switch 3, and/or the processor 10 in the terminal 1 adjusts a predefined sampling rate, reserves a predefined amount of time and/or deactivates noise reduction. As a result, the user can now perform command and control, by entering speech via the microphone of the mmi 11, which via the switch 3 is supplied to the speech recognizer 2 for recognizing the speech, in response to which commands and/or controls are recognized and a corresponding command and/or control is performed.[7]

[7] Application at page 7, line 5 - page 7, line 21.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Barzegar et al. (USP 6,363,079; hereafter "Barzegar").

VII. ARGUMENTS

Appellant respectfully submits the claimed invention would not have been rendered obvious in view of Barzegar because cited reference does not disclose, teach or suggest all of the features of the claimed invention, and one of ordinary skill in the art would not have been motivated to modify the reference's teachings to produce the claimed invention.

Independent claim 1 is directed to a telecommunication system comprising a network and a terminal communicably linked to the network. Claim 1 recites that the network comprises:

> a switch comprising a detector for detecting an indication signal generated by said terminal; and
>
> a speech recognizer for vocal commanding, said speech recognizer comprising an adjustor for adjusting a variable capacity parameter for said vocal commanding based on said indication signal detected by said detector.

Independent claims 4, 7 and 10 recite similar limitations with regard to adjusting a variable capacity parameter for vocal commanding based on an indication signal.[8]

The Examiner maintains that Barzegar discloses all of the features of independent claims 1, 4, 7 and 10 except for "combining speech recognition and bandwidth on demand together for implementing functionality as the claimed 'said speech recognizer comprising an adjustor for

[8] Claim 4 is directed to a speech recognizer and requires "an adjustor adjusting a capacity parameter for said vocal commanding based on said indication signal detected by said detector." Claim 7 is directed to a terminal and requires "said terminal being coupled to said network and generating an indication signal, wherein said telecommunication system comprises a detector for detecting said indication signal and an adjustor adjusting a capacity parameter for said vocal commanding based on said indication signal" Claim 10 is directed to a method and requires "generating at said terminal a indication signal; detecting at said network an indication signal; and adjusting at said network a capacity parameter for said vocal commanding based on said indication signal."

adjusting a variable capacity parameter for said vocal commanding based on said indication signal detected by said detector.'"[9]

However, the Examiner alleges:

> Barzegar discloses that the **preferred embodiment** provides a bandwidth on demand feature through the interface ISD 22 (Fig. 1) (column 13, lines 40-45); the **preferred design** includes the voice dialing service feature (column 15, lines 31-32); and the voice/call processor may handle voice recognition functions for spoken commands from **any of the ISD** connected devices (column 10, lines 4045), which suggests the motivation and connection for combining speech recognition and bandwidth on demand features in the application. Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to provide the preferred design into the preferred embodiment by combining speech recognition feature and bandwidth on demand feature with an ISD interface, as taught by Barzegar, for the purpose of full taking advantage of available services and offering efficient communications (column 13, lines 43 and column 15, lines 31-32) for the system.[10]

Appellant respectfully submits that the claimed invention would not have been rendered obvious in view of Barzegar because the cited reference does not teach or suggest adjusting a capacity parameter for the vocal commanding based on the indication signal, as required by the claims. In particular, although Barzegar does disclose utilizing speech recognition in a voice dialing scenario (e.g., see column 15, lines 1-30 of Barzegar), the capacity parameter for the vocal dialing appears to be fixed (i.e., nowhere does Barzegar teach or suggest that a capacity

[9] June 14, 2004 Office Action at page 6.

[10] June 14, 2004 Office Action at page 6.

parameter for the voice dialing is adjusted based on an indication signal generated by a terminal). On the other hand, the present invention, teaches that a flexible capacity parameter is utilized for adjusting the available bandwidth between terminal and speech recognizer and/or for adjusting a processor capacity of terminal and/or speech recognizer, e.g., a sampling rate or a noise reduction being deactivated, as a result of which name dialing, command and control, and dictation can be done with the highest efficiency.[11]

Although the Examiner cites column 13, lines 40-45 of Barzegar for disclosing a bandwidth on demand feature through the interface ISD 22, and column 15, lines 31-32 and column 10, lines 40-45 of Barzegar for disclosing voice dialing and handling voice commands, nowhere does Barzegar teach or suggest that the voice dialing service provided by network server complex 38 (facilities management platform 32 and network server platform 36) adjusts a variable capacity parameter for vocal commanding (i.e., voice dialing). Rather, Barzegar simply discloses that the voice dialing allows a subscriber to call another subscriber by giving a vocal command (e.g., stating the other subscriber's name). Further, as discussed on column 14, lines 13-38, Barzegar's teachings with regard to bandwidth on demand simply relate to giving bandwidth allocation priority to voice calls over data transfers (i.e., if an available channel does not exist when a new voice call comes in, a channel may deallocated from data usage for allocation to the new voice call since voice usage has a higher priority than data usage).

[11] Application at paragraph bridging pages 1 and 2.

In the "Response to Arguments" section of the June 14, 2004 Office Action, the Examiner cites Barzegar's disclosure of providing high priority to voice communications by the ISD 22 by providing a bandwidth on demand (column 13, lines 40-45) and contends that this "inherently includes a mechanism (adjustor) "for adjusting a variable capacity parameter", since bandwidth-on-demand must provide a capacity related parameter, such as bandwidth or transmission rate, for implementing the functionality."[12] Further, the Examiner repeatedly asserts it would have been obvious to modify Barzegar by combining the separate teachings of the cited reference in such a way to produce the claimed invention.[13]

Although Barzegar discusses bandwidth on demand applications and variable bandwidth applications, nowhere does the cited reference teach or suggest in any way that these applications may be utilized with the disclosed voice dialing in order to adjust a variable capacity parameter for vocal commanding. In Barzegar, there is no disclosed or suggested connection between the voice-dialing application and the bandwidth-on-demand application which would lead one of ordinary skill in the art to modify the teachings of Barzegar produce the claimed invention. That is, Barzegar does not disclose a voice command scenario where different bandwidth might be allocated within the voice command scenario, or provide any motivation to combine a particular bandwidth allocation with the voice-dialing scenario.

---

[12] June 14, 2004 Office Action at paragraph bridging pages 2 and 3.

[13] June 14, 2004 Office Action at pages 3 and 4.

On the other hand, the present invention utilizes an indication signal from a terminal to adjust a variable capacity parameter. Furthermore, the object from which the present invention starts, i.e., that speech recognition in conventional telecommunication systems (such as Barzegar) "based upon a fixed capacity (with said vocal commanding taking place via a fixed bandwidth between source and destination - and/or a fixed sampling rate at source and/or destination ..." (see first three paragraphs of page 1 of the present application) is inefficient and disadvantageous, is not even addressed in Barzegar.

Further, Appellant respectfully submits that the Examiner not provided any objective reasoning why one of ordinary skill in the art would have been motivated to modify Barzegar. The sections of Barzegar (column 13, lines 43 and column 15, lines 31-32) cited by the Examiner as providing the alleged motivation (i.e., "for the purpose of full taking advantage of available services and offering efficient communications") do not provide any motivation to combine a particular bandwidth allocation with the voice-dialing scenario. Rather, the cited sections simply indicate the preferred "embodiment [of Barzegar] makes it simple and efficient to provide high priority to voice communications by the ISD 22 by providing a bandwidth on demand ..." (column 13, lines 43) and provides the implicit advantage that "voice dialing may be provided by a different company from the one that actually makes the call" (column 15, lines 31-34).

The Examiner generally alleges that "bandwidth-on-demand providing a mechanism for adjusting a variable capacity parameter and spoken commands providing capacity related command (particularly when combining bandwidth-on-demand and voice recognition) are

common knowledge in the art" (emphasis added).[14] While Appellant agrees that bandwidth on demand applications and voice dialing applications are well known in the art, the Examiner's allegation that combining bandwidth on demand and voice recognition applications is "common knowledge" is not supported by the prior art or evidence of record.

In summary, Barzegar does not disclose a voice command scenario where different bandwidth might be allocated within the voice command scenario, and the Examiner has not provided any objective reasoning why one of ordinary skill in the art would have been motivated to modify Barzegar to produce the claimed invention. Therefore, Appellant respectfully submits that the Examiner's conclusions could only be based on impermissible hindsight in construing the reference as he has to yield the present invention. In particular, Appellant respectfully submits that the Examiner is improperly using his knowledge of the present invention, in hindsight, to conclude that one skilled in the art would have found it obvious to modify the teachings of Barzegar to adjust a variable capacity parameter for vocal commanding based on an indication signal from a terminal.

In view of the above, Appellant respectfully submits that independent claims 1, as well as dependent claims 2-14, should be allowable because the cited reference does not teach or suggest all of the features of the claimed invention, and one of ordinary skill in the art would not have been motivated to modify the reference's teachings to produce the claimed invention.

[14] June 14, 2004 Office Action at paragraph bridging pages 3 and 4.

Accordingly, it is requested that the rejection of the claims be reversed and the claims passed to issue.

Unless a check is submitted herewith for the fee required under 37 C.F.R. §41.37 and 1.17(c), please charge said fee to Deposit Account No. 19-4880.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Christopher R. Lipp
Registration No. 41,157

Date: November 15, 2004

Attorney Docket No.: Q68455

CLAIMS APPENDIX

CLAIMS 1-14 ON APPEAL:

1. (Previously Presented) A telecommunication system comprising:

a network; and

a terminal communicably linked to said network,

wherein said network comprises:

a switch comprising a detector for detecting an indication signal generated by said terminal; and

a speech recognizer for vocal commanding, said speech recognizer comprising an adjustor for adjusting a variable capacity parameter for said vocal commanding based on said indication signal detected by said detector.

2. (Previously Presented) A telecommunication system according to claim 1, wherein said adjustor further adjusts said capacity parameter based on a network signal generated by said network.

3. (Previously Presented) A telecommunication system according to claim 1, wherein said terminal comprises a preprocessing unit for preprocessing signals, and said speech recognizer comprising a final processing unit for final processing said preprocessed signals.

4. (Previously Presented) A speech recognizer for use in a telecommunication system comprising a terminal coupled to a network comprising said speech recognizer for vocal commanding and a detector for detecting an indication signal generated by said terminal, said speech recognizer comprising an adjustor adjusting a capacity parameter for said vocal commanding based on said indication signal detected by said detector.

5. (Previously Presented) A speech recognizer according to claim 4, wherein said adjustor further adjusts said capacity parameter based on a network signal generated by said network.

6. (Previously Presented) A speech recognizer according to claim 5, wherein said terminal comprises a preprocessing unit for preprocessing signals, and said speech recognizer further comprises a final processing unit for final processing said preprocessed signals.

7. (Previously Presented) A terminal for use in a telecommunication system comprising a network comprising a speech recognizer for vocal commanding, said terminal being coupled to said network and generating an indication signal, wherein said telecommunication system comprises a detector for detecting said indication signal and an adjustor adjusting a capacity parameter for said vocal commanding based on said indication signal.

8. (Previously Presented) Terminal according to claim 7, wherein said terminal comprises a man-machine-interface for receiving said indication signal.

9. (Previously Presented) Terminal according to claim 7, wherein said terminal comprises a preprocessing unit for preprocessing signal, with said network comprising a final processing unit for final processing said preprocessed signals.

10. (Previously Presented) Method for use in a telecommunication system comprising a terminal coupled to a network, said network comprising a speech recognizer for vocal commanding, said method comprising:

generating at said terminal a indication signal;

detecting at said network an indication signal; and

adjusting at said network a capacity parameter for said vocal commanding based on said indication signal.

11. (Previously Presented) A telecommunications system according to claim 1, wherein said indication signal is generated by said terminal.

12. (Previously Presented) A telecommunication system according to claim 1, wherein said indication signal comprises a telephone number, a key signal or a vocal signal generated by a user of said terminal.

13. (Previously Presented) A telecommunication system according to claim 1, wherein said switch comprises a processor for generating an information signal in response to the indication signal detected by said detector, said adjustor adjusts said capacity parameter based on said information signal.

14. (Previously Presented) A telecommunication system according to claim 13, wherein said processor controls at least one of an available bandwidth, sampling rate, and noise reduction with regards communication with said terminal based on said capacity parameter.

EVIDENCE APPENDIX

There has been no evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 or any other similar evidence.

RELATED PROCEEDINGS APPENDIX

There are no related proceedings.